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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,618	03/18/2004	Yuichi Taguchi	16869B-102700US	7877
20350 7590 01/10/2008 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			EXAMINER MAHMOOD, REZWANUL	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,618

Applicant(s)

TAGUCHI, YUICHI

Examiner

Rezwanul Mahmood

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-16 and 18-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the communication filed on October 16, 2007.

Response to Amendment

2. Claims 1, 3-16, and 18-24 are pending in this office action.

Response to Arguments

3. Applicant's arguments filed on October 16, 2007 have been fully considered but they are not persuasive for the following reasons:

Applicant argues that Liang does not teach or even suggest the features "storing data management rule information for a data file in the header".

Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-1]

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Aguren teaches in Abstract lines 1-5, Paragraph 4 lines 1-9, Paragraph 16 lines 1-9, Paragraph 21 lines 1-17, Paragraph 52 lines 1-20, Paragraph 92 lines 1-8 and Figure 5 associating data management rule information to a data file as file attributes. However, Aguren does not explicitly disclose storing the management rule information in the header of a data file. Liang teaches in Paragraph 37 lines 1-7 and Figure 5 storing rule information/attributes on the header of a file. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to modify the teachings of Aguren with the teachings of Liang to store the data management rules on the header of the data file for accessing storage objects in a file server (Liang: Paragraph 2, lines 4-5; Paragraph 6, line 2).

In response to applicant's argument, to combine the Aguren and Liang references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

"Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, test is what combined teachings of references would have suggested to those of ordinary skill in art."

In re Keller, Terry, and Davies, 208 USPQ 871 (CCPA 1981).

"Reason, suggestion, or motivation to combine two or more prior art references in single invention may come from references themselves, from knowledge of those skilled in art that certain references or disclosures in references are known to be of interest in particular field, or from nature of problem to be solved;" Pro-Mold and Tool Co. v. Great Lakes Plastics Inc. U.S. Court of Appeals Federal Circuit 37 USPQ2d 1626 Decided February 7, 1996 Nos. 95-1171, -1181

"[q]uestion is whether there is something in prior art as whole to suggest desirability, and thus obviousness, of making combination." Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al. U.S. Court of Appeals Federal Circuit 221 USPQ 481 Decided Mar. 21, 1984 No 83-1178.

For the above reasons, Examiner believed that rejection of the last Office action was proper.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-16 and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aguren (US Publication 2005/0065961) in view of Liang (US Publication 2005/0044162).

6. With respect to claim 1, Aguren discloses a storage system, comprising:

a host configured to receive a data file from a client, the host including a data management rule set program that is operable to associate data management rule information to the data file received from the client and determine how to protect and relocate the data file wherein the data management rule information includes information for retention and relocation of the data file and includes user-set data management rules for the data file (Aguren: Abstract, lines 1-5; Paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5)

a first storage subsystem configured to receive and store the data file from the host, the storage system including a storage controller and a plurality of storage volumes (Aguren: Paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5),

Aguren does not explicitly disclose wherein the data management rule information is stored in a header of the data file.

The Liang reference, however, discloses storing rule information in a header of a data file (Liang: Paragraph 37, lines 1-7; Figure 5).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the teachings of Aguren with the teachings of Liang to store data management rule information in a header of a file for sharing data storage objects between clients and servers and to access a storage object in a file server (Liang: Paragraph 2, lines 4-5; Paragraph 6, line 2)

a data protection server including a data protection management program that cooperates with the first storage subsystem to protect the data file stored in the first storage subsystem in accordance with the data management rule information, the data protection server looking up the data management rule information in the header of the data file to determine action to protect the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5); and

a data relocation server that controls relocation of the data file from the first storage subsystem to another storage subsystem in accordance with the data management rule information (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

7. With respect to claim 3, Aguren in view of Liang discloses the storage system of claim 1, wherein the data management rule information relates to a retention period of the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

8. With respect to claim 4, Aguren in view of Liang discloses the storage system of claim 1, wherein the first storage subsystem further comprises a data protection program that cooperates with the data protection management program of the data protection server to protect the data file stored in the first storage subsystem, wherein

the data management rule information is attached to the data file and transmitted to the first storage subsystem with a data content of the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

9. With respect to claim 5, Aguren in view of Liang discloses the storage system of claim 1, wherein the data relocation server includes a data relocation management program and a storage information table including information about storage subsystems and storage media associated with the storage system, wherein the data relocation management program initiates the relocation of the data file to a second storage volume to which the data file will be relocated by looking up the storage information table for a suitable storage location for the second storage volume (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

10. With respect to claim 6, Aguren in view of Liang discloses the storage system of claim 5, wherein the second storage volume is located in a second storage subsystem of the storage system (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

11. With respect to claim 7, Aguren in view of Liang discloses the storage system of

claim 1, wherein the data relocation server and the host are different devices (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

12. With respect to claim 8, Aguren in view of Liang discloses the storage system of claim 1, wherein the data protection server and the host are different devices (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

13. With respect to claim 9, Aguren in view of Liang discloses the storage system of claim 1, wherein the data management rule set program of the host inserts a plurality of management rules into the header of a data file, the management rules relating to information about a retention period and relocation instructions of the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5).

14. With respect to claim 10, Aguren in view of Liang discloses a management server provided in a storage system, the storage system including one or more hosts and one or more storage subsystems (Aguren: Paragraph 15, lines 1-13; Paragraph 16, lines 1-9; Figures 1-5), the management server comprising:

a memory to store data (Aguren: Paragraph 15, lines 1-13; Paragraph 16, lines 1-9; Figures 1-5);

a processor to process data (Aguren: Paragraph 15, lines 1-13; Paragraph 16, lines 1-9; Figures 1-5);

a network interface to link with one or more computers of the storage system,
and

a first management program to attach data management rule information to a data file to be stored in a storage subsystem of the storage system, the data management rule information relation to a retention period and to relocation information of the data file and including user-set data management rules for the data file (Aguren: Paragraph 15, lines 1-13; Paragraph 16, lines 1-9; Figures 1-5),

wherein the data file and the data management rule information are stored in a storage volume of the storage subsystem (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5);

wherein the data management rule information is inserted into a header of the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5); and

wherein the management server includes a second management program that cooperates with a file system to store the data file in the storage subsystem, the second management program looking up the data management rule information inserted into the header of the data file to determine action to take with respect to the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17;

Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

15. With respect to claim 11, Aguren in view of Liang discloses the server of claim 10, wherein the server is a host that is configured to receive data files from a client of the storage system and send read and write requests to the storage subsystem (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

16. With respect to claim 12, Aguren in view of Liang discloses the server of claim 10, wherein the second management program is a data protection management program or a data relocation management program (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7).

17. With respect to claim 13, Aguren in view of Liang discloses a management server provided in a storage system, the storage system including one or more hosts and one or more storage subsystems; the management server comprising:

- a memory to store data (Aguren: Paragraph 15, lines 1-13; Paragraph 16, lines 1-9; Figures 1-5);

- a processor to process data (Aguren: Paragraph 15, lines 1-13; Paragraph 16,

lines 1-9; Figures 1-5);

a network interface to link with one or more computers of the storage system
(Aguren: Paragraph 15, lines 1-13; Paragraph 16, lines 1-9; Figures 1-5); and

a first management program operable to access a header of a data file to look up data management rule information inserted in the header and manage the data file according to the data management rule information inserted in the header, the data management rule information relating to a retention period and to relocation instructions of the data file, and including user-set data management rules for the data file (Aguren: Paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: Paragraph 37, lines 1-7; Figure 5).

18. With respect to claim 14, Aguren in view of Liang discloses the server of claim 13, wherein the server is a data protection server and the first management program is a data protection management program (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

19. With respect to claim 15, Aguren in view of Liang discloses the server of claim 13, wherein the server is a data relocation server and the first management program is a data relocation management program (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20;

Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

20. With respect to claim 16, Aguren in view of Liang discloses a method for managing a data file stored in a storage system, the storage system including one or more client, one or more hosts, one or more storage subsystems (Aguren: Paragraph 15, lines 1-13; Paragraph 16, lines 1-9; Figures 1-5), the method comprising:

receiving a data file including a header and a data content (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5);

attaching data management rule information to the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5);

storing the data file and the data management rule information at a first storage location in a first storage subsystem, the data management rule information relating to retention and to relocation information of the data file and including user-set management rules for the data file (Aguren: Paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: Paragraph 37, lines 1-7);

notifying a management program about the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14;

Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5);

accessing the data management rule information attached to the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5); and

performing a management act relating to the data file according to the data management rule information (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5),

wherein the data management rule information is inserted into a header of the data file (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

21. With respect to claim 18, Aguren in view of Liang discloses the method of claim 16, wherein the data management rule information is accessed by a data protection management program provided in a data protection server, the management act being an act related to preventing the data file stored in the first storage location from being modified or deleted (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

22. With respect to claim 19, Aguren in view of Liang discloses the method of claim 16, wherein the data management rule information is accessed by a data relocation server, and the management act relates to relocating the data file to a second storage location (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

23. With respect to claim 20, Aguren in view of Liang discloses the method of claim 16, wherein the data management rule information is inserted into the header of the data file by a host (Aguren: paragraph 4, lines 1-9; Paragraph 16, lines 1-9; Paragraph 21, lines 1-17; Paragraph 43, lines 1-14; Paragraph 52, lines 1-20; Paragraph 92, lines 1-8; Figure 5; Liang: paragraph 37, lines 1-7; Figure 5).

24. With respect to claim 21, Aguren in view of Liang discloses the storage system of claim 1, wherein the data management rule information includes default rules for a n application with the data file (Aguren: Abstract, lines 1-5; Paragraph 16, lines 1-9).

25. With respect to claim 22, Aguren in view of Liang discloses the management server of claim 10, wherein the data management rule information includes default rules for an application associated with the data file (Aguren: Abstract, lines 1-5; Paragraph 16, lines 1-9).

26. With respect to claim 23, Aguren in view of Liang discloses the management server of claim 13, the data management rule information includes default rules for an application associated with the data file (Aguren: Abstract, lines 1-5; Paragraph 16, lines 1-9).

27. With respect to claim 24, Aguren in view of Liang discloses the method of claim 16, the data management rule information includes default rules for an application associated with the file (Aguren: Abstract, lines 1-5; Paragraph 16, lines 1-9).

Conclusion

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Greenblatt reference (US Publication 2003/0115204)

teaches about data management server and storage systems. The Gajjar reference (US Publication 2002/0174306) teaches about policy based storage management. The Umebayashi reference (US Publication 2004/0010701) teaches about a data protection program. The Trimmer reference (US Publication 2004/0044863) teaches about a data protection program. The Prahlad reference (US Publication 2006/0010154) teaches about a system and method performing storage operations using network attached storages. The Boraz reference (US Publication 2006/0288183) teaches about a data protection server and program. The Thomlinson reference (US Patent 6,389,535) teaches about data protection server and program. The Arnold reference (US Publication 2004/0199782) teaches about privacy enhanced storage. The Bridge reference (US Patent 6,530,035) teaches about managing storage systems containing redundancy data..

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rezwanul Mahmood whose telephone number is (571)272-5625. The examiner can normally be reached on M - F 10 A.M. - 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571)272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rezwanul Mahmood
Examiner
Art Unit 2164

January 7, 2008



CHARLES RONES
SUPERVISORY PATENT EXAMINER